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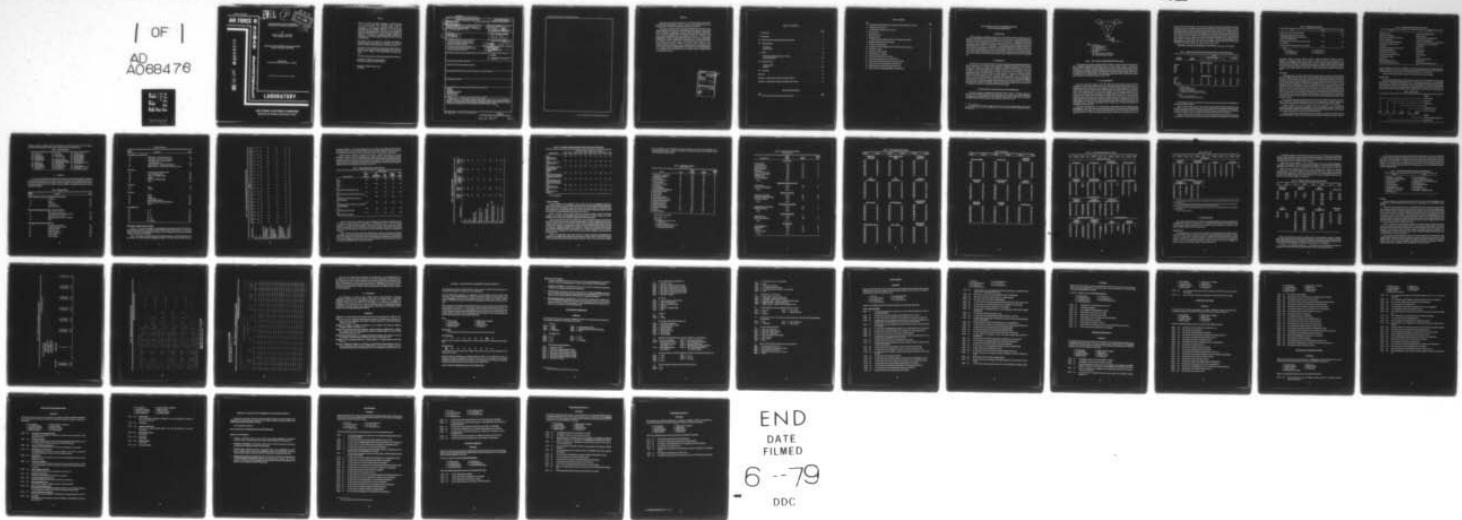
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ORGANIZATIONAL SURVEY ASSESSMENT  
PACKAGE FOR AIR FORCE ORGANIZATIONS

By

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OCCUPATION AND MANPOWER RESEARCH DIVISION  
Brooks Air Force Base, Texas 78235

February 1979

Interim Report for Period 14 June 1976 – 7 July 1978

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This report has been reviewed by the Information Office (OI) and is releasable to the National Technical Information Service (NTIS). At NTIS, it will be available to the general public, including foreign nations.

This technical report has been reviewed and is approved for publication.

**RAYMOND E. CHRISTAL, Technical Director  
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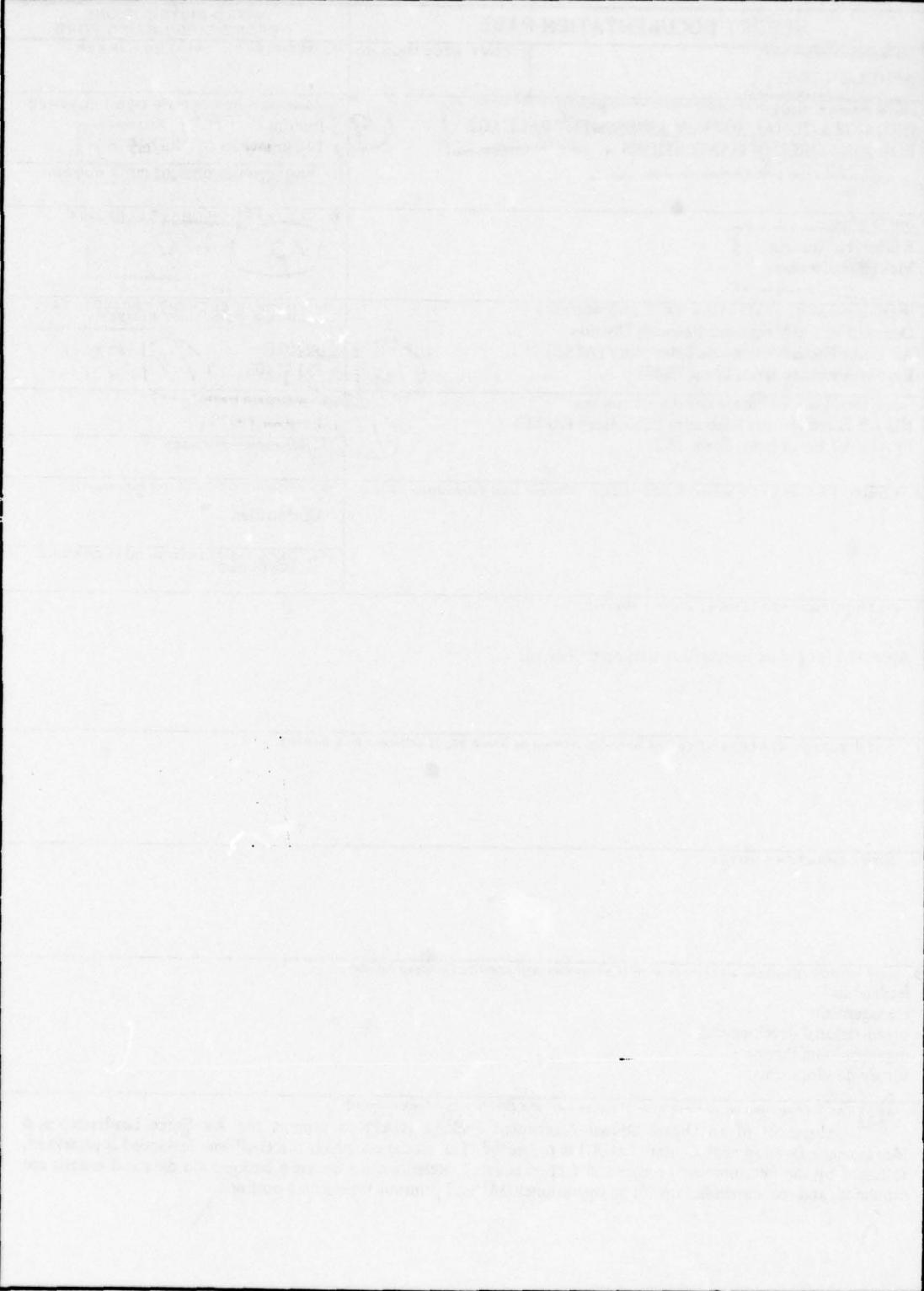
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## PREFACE

This research was completed under Work Unit 2313T103, Supervisory Style Effects on Productivity and Retention; in response to Request for Personnel Research 77-10, Development and Analysis of Organizational Assessment Package (OAP).

The authors are indebted to the Leadership and Management Development Center (LMDC) personnel whose assistance in data gathering were invaluable to this research effort. In particular, the constructive comments of Major David Wilkerson (LMDC/EDC) and Lt Col Fred Petty (LMDC/EDC) were especially beneficial. Also, this program could not have been accomplished without the assistance provided by Col Peter A. Land (LMDC/DMC), Col Henry M. Kelly (LMDC/EDC), Major L. B. Henry, Jr. (LMDC/DMC), CMSgt Richard G. Buxton (LMDC/EDC), and SMSgt Judith A. Vermilya (LMDC/DMC). The computer support provided by the Computational Sciences Division, Air Force Human Resources Laboratory (AFHRL) was without a doubt outstanding. These personnel worked long, hard hours to meet stringent deadlines. In particular, the efforts of Mr. Charles Greenway (AFHRL/SMAW), A1C Michael D. Cowan (AFHRL/SMAW), A1C B. David Brewer (AFHRL/SMAW), and SrA Debbie McQuiston (AFHRL/SMOQ) were especially noteworthy.

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## ORGANIZATIONAL SURVEY ASSESSMENT PACKAGE FOR AIR FORCE ORGANIZATIONS

### I. INTRODUCTION

Within organizations, management personnel are concerned with how well their organization meets its objectives. These objectives are frequently measured in terms of productivity, cost savings, and retention of personnel. The Air Force continues to be vitally concerned with this area of organizational effectiveness. This interest includes organizational behavior research, implementation of organizational effectiveness programs such as job enrichment, and evaluation of organizational development programs Air Force wide. This technical report focuses on the development of an organizational assessment package in support of a current Air Force program designed to improve the effectiveness of organizations throughout the Air Force. Two objectives of this research are reported as recommendations. The first is a recommended operational version of the organizational assessment package based on research analyses. The second includes a series of recommended printout formats which present research data in a logical, efficient format for operational use.

### II. BACKGROUND

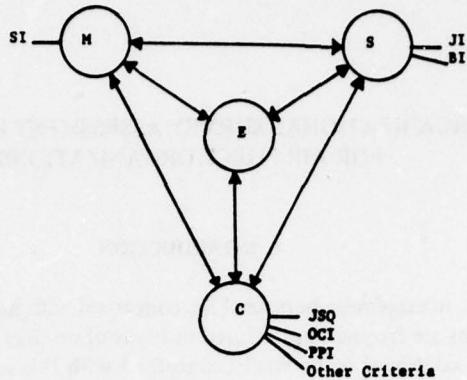
The survey instrument package developed is entitled the Organizational Assessment Package (OAP). It has been developed for use by the Air Force Leadership and Management Development Center (LMDC) Maxwell AFB, Alabama. The LMDC mission includes (a) providing consultative services to Air Force commanders, (b) providing leadership and management training to Air Force personnel in their work environment, and (c) performing research in support of (a) and (b). The consultative role involves organizational problem area identification and recommendations for reducing or eliminating problems identified. The OAP was designed to meet the mission objectives of LMDC. First, the OAP provides a means of identifying existing strengths and weaknesses within organizational work groups and aggregated work groups, such as directorates. Second, research results can be fed back into their Professional Military Education; other leadership and management training courses; and when action is required, to Air Staff and functional offices of primary responsibility. Lastly, the OAP data base established can be used for research to strengthen the overall Air Force organizational effectiveness program.

### III. THREE COMPONENT ORGANIZATIONAL EFFECTIVENESS MODEL

The Three Component Organizational Effectiveness Model<sup>1</sup> (Figure 1) previously reported by Hendrix (1976) considered Organizational Effectiveness (E) to be a function of the criterion selected (c), the managerial style employed (m), and the situational environment (s) which includes the manager's subordinates, peers, and other personnel in the environment, that is,  $E = f(c, m, s)$ .

---

<sup>1</sup>In Hendrix (1976), the model was initially entitled the Three Component Leadership Effectiveness Model and has since been expanded to focus on the entire organization. Also the concept of leader (l) has been replaced in the model by the manager (m).



Legend:

M = Management Style  
 SI = Supervisory Inventory  
 S = Situational Environment  
 JI = Job Inventory  
 BI = Background Information  
 E = Effectiveness  
 C = Criterion  
 JSQ = Job Satisfaction Questionnaire  
 OCI = Organizational Climate Inventory  
 PPI = Perceived Productivity Inventory

*Figure 1. Three component organizational effectiveness model.*

The Organizational Assessment Package (OAP) was designed to measure the basic components of the Three Component Organizational Effectiveness Model. As can be noted in Figure 1, the Supervisor Inventory (SI) was designed to measure managerial style (m), while the situational environment (s) was to be measured by two sections of the OAP, the Background Information section, and the Job Inventory (JI). The criteria selected included satisfaction, organizational climate, and perceived productivity. These were to be measured by the sections entitled: Job Satisfaction Questionnaire (JSQ), Organizational Climate Inventory (OCI), and Perceived Productivity Inventory (PPI).

#### IV. OAP DEVELOPMENT

There have been three versions of the OAP. These three versions reflect progress toward the development of an optimal survey package in terms of minimizing length while reliably measuring isolated organizational factors. The first version was in keypunch format and contained Background Information, the short version of the Job Diagnostic Survey (JDS) developed by Hackman, Oldham, Janson, and Purdy (1975), and 154 additional items. In an earlier study (Hendrix, 1977), the results of a small scale study of version 1 were reported. This study was conducted at Lackland AFB, Texas, during May 1977. One purpose of the study was to collect critique information on the OAP in order to improve it. In addition, the data provided an initial baseline in terms of means and standard deviations for each item on the OAP. An intercorrelation matrix, consisting of the OAP item variables plus a series of variables generated from the original variables, was used to (a) delete items which did not intercorrelate well with the stated factors and (b) establish simple correlational relationships between variables in the situational environment and managerial area with criteria items.

The major modification due to the Lackland study was the deletion of the Job Diagnostic Survey (JDS) (Hackman et al., 1975) from the instrument package, with the JI being used instead to establish the job enrichment variable values. The reason for deleting the JDS instead of the JI was to reduce the total pages in the OAP (i.e., the JDS was approximately seven pages, and the JI was two pages) and to have the

format of the inventory the same as that of the other inventories within the OAP. The JDS is an excellent instrument, and if the JI indicates a job enrichment problem exists within an organization, then a more thorough examination could be accomplished using the JDS. Table 1 presents for the Lackland study the intercorrelations of selected criterion items with the situational variables: (a) total score across items on the JI (JI Total), (b) Motivation Potential Score (MPS) and Growth Need Score (GNS) as defined by Hackman et al. (1975), (c) Need for Enrichment Index (NEI) which is derived from the JI and is the total score of all items indicating a need for enrichment, and (d) Job Motivation Index (JMI) which is computed with the same formula as the GNS. Table 1 also presents for the Major Command study (MAJCOM study) the intercorrelations of criterion items with the situational variables: (a) JI Total, (b) NEI, (c) JMI, and (d) JMI-Additive. The JMI is a multiplicative model computed by the formula:

$$\text{(skill variety} + \text{task identity} + \text{task significance} + \text{work irritants}) \times \text{Autonomy} \times \text{Job Feedback.}$$

4

*Table 1. Lackland AFB and MAJCOM Job Enrichment Indices Correlated with Criteria*

Situational Variable	Work Satisfaction	Criteria					
		Perceived Productivity <sup>a</sup>				Climate <sup>b</sup>	
		1	2	3	4	1	2
<b>Lackland AFB Study</b>							
JI Total	.52	.26	.41	.30	-.12	.26	.22
MPS	.62	.21	.39	.32	-.21	.26	.22
GNS	.16	.21	.15	.16	.10	.14	.22
NEI	.23	.16	.19	.16	-.04	.18	.16
JMI	.56	.32	.44	.32	-.17	.30	.25
<b>MAJCOM Study</b>							
JI Total	.56	.22	.28	.31	-.19	.38	.34
NEI	.19	.11	.22	.26	.06	.05	.26
JMI	.47	.15	.27	.29	-.21	.34	.31
JMI-Additive	.52	.18	.29	.32	-.23	.41	.35

<sup>a</sup>Perceived Productivity

1 = Quantity of Work Output.

2 = Quality of Work Output.

3 = Performance when high priority work arises.

4 = Efficiency in work flow from and to work group.

<sup>b</sup>Climate

1 = You are proud of organization.

2 = You feel responsible for your organization.

The JMI-Additive index is computed by the same formula except that autonomy and feedback are added instead of being multiplied.

Table 2 presents a summary of the critique information provided by individuals completing the OAP. Generally, the directions were perceived as clear, easy to understand, and providing adequate information to answer the questions. The survey maintained the subjects' interest to a moderate extent; a loss of interest was noted in statements written in by subjects and was reported as being due to survey length.

Version 2 of the OAP was an optical scan version containing 15 Background Information items plus 152 additional attitudinal items. This version was presented to LMDC for consideration as an operational

Table 2. Lackland Critique Summary

Item	Mean	SD
To what extent were the directions clear?	5.13	1.26
To what extent did the directions provide sufficient information for you to effectively answer the questions asked?	5.18	1.29
To what extent did the various inventories maintain your interest?	4.35	1.70
To what extent were the words easy to understand?	5.41	1.42

**Scale:**

1 = Not at all.	5 = To a fairly large extent.
2 = To a very little extent.	6 = To a great extent.
3 = To a little extent.	7 = To a very great extent.
4 = To a moderate extent.	

test version. Version 2 was never tested but served as a basis for modifications leading to Version 3 (Appendix A). Information which would be common at a given base (e.g., base, command, date) was removed from the Background Information section in Version 3; these data, during the validation phase, were batched into the computer via a separate optical scan form. In addition, LMDC modified the wording of a series of items and deleted 40 items from the supervisor inventory prior to approving the OAP for validation. These changes resulted in OAP Version 3, which was validated during January through July 1978.

#### OAP Factors

Items within each of the OAP sections (Version 3) were written to measure certain hypothesized factors. The *Background Information* section contains biographical information items and items associated with factors in the situational environment. The factors in the situational environment which the items attempted to measure included (a) organizational level of work group, (b) work group type, (c) work group size, (d) group member maturity, (e) organization's geographic region, (f) extent to which work group meetings are used to establish goals, (g) extent of communication between work group members, and (h) stability of work hours. In addition, the situational environment was in part measured by the Job Inventory (JI). In the main, the factors included in the JI are based on the job enrichment model proposed by Hackman et al. (1975). They proposed five basic factors which they called Core Job Dimensions: (a) skill variety, (b) task identity, (c) task significance, (d) autonomy, and (e) feedback from the job. These factors were measured by the JI, plus one additional work-related factor, which was labeled *Work Interference*. This factor deals with the extent and adequacy of (a) additional duties, (b) equipment and supplies, and (c) provided work space.

In the criterion area, organizational climate was measured by the *Organizational Climate Inventory*, which included the following hypothesized factors: (a) communications, (b) general organizational conditions, (c) employee concern, (d) employee commitment, (e) decision making, and (f) recognition.

Another criterion area was job satisfaction, which was measured by the *Job Satisfaction Questionnaire* (JSQ). This questionnaire contained 30 items which included descriptions of 30 factors out of the 35 isolated by Gould (1978). The methodology and items used to isolate the factors can be found in Tuttle, Gould, and Hazel (1975). The 30 factors are listed in Table 3.

The last criterion was perceived productivity and was measured by seven items contained within the *Perceived Productivity Inventory* section. The items measured perceived productivity in terms of the work

*Table 3. Job Satisfaction Questionnaire Factor Items*

Item	Item
Additional Duties	Social Contact Opportunities
Equipment and Supplies	Physical Activity
Information on Policies and Procedures	Verbal and Written Communication
Feeling of Helpfulness	Supervisor Responsibilities
Control of Others (Non-Supervisory)	Temporary Duty (TDY) Costs and Conditions
Characteristics of the Local Area	Temperature of Work Environment
Work Space	Leave Policies
Social Contact (Other than Co-workers)	Work Itself
Co-Worker Relationships	Work Schedule
Family Attitude Toward Job	Job Security
Independence in Work Procedures	Safety Programs
Job-Associated Training	Travel
Job Hazards	Acquired Valuable Skills
Moral Acceptability of Job	Base Facilities
Self-Improvement Opportunities	Base Housing and Eating Facilities

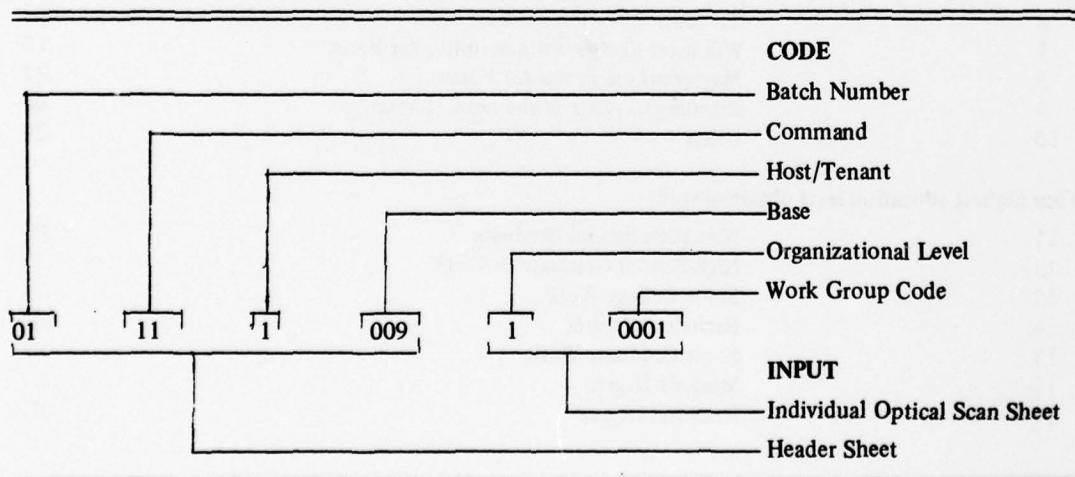
group's (a) quantity of work output, (b) quality of work output, (c) performance when high priority work arises, (d) whether flow of work to or from the work group is impaired, (e) frequency of crash projects, (f) work group output, and (g) comparison of work-group performance to other work groups.

The Supervisory Inventory (SI) consisted of 41 items relating to supervisory behavior.

#### Structure Code

The concept underlying analysis of OAP data was that the basic unit of analysis was the work group, i.e., any group of individuals performing work under a work group supervisor/manager. In operationalizing data collection, a structure code was developed which contained digits for identifying the batch number, the major command, whether the command was a host or tenant organization, the base, the organizational level of a given work group, and the work group code. Table 4 presents an example of a structure code. The batch number is used to identify different major organizations on the same base. The work group code

*Table 4. Structure Code*



identifies a specific work group. Table 5 shows examples of work group codes (i.e., last four digits of structure code) used by LMDC during their data collection phase for the personnel area.

*Table 5. Work Group Codes*

1400	Director of Personnel	1410	Chief of CBPO	1420	Chief, Personnel Utilization
1401	DP Sgt Major	1411	NCOIC of CBPO	1421	Chief, Manning Control
1402	Chief, Admin/Clerical	1412	Chief, Admin/Clerical	1422	Chief, Outbound Assignments
1404	Chief, Suggestion Program	1413	Personnel System Manager	1423	Chief, Airman Assignments
1405	Chief, Intro Program	1440	Chief, Customer Assistance	1424	Chief, Officer Assignments
1406	Chief, Education Services	1441	Chief, Customer Service Center	1425	Chief, Passport and Admin
1407	Chief, Education Services	1442	Chief, Customer Service Cen Satellite	1426	Chief, Personnel Readiness
1430	Chief, Quality Force	1443	Chief, Customer Service Cen Satellite	1427	Chief, Student Control
1431	Chief, Special Actions	1444	Chief, Personal Affairs	1428	Chief, Classification & Testing (Class II)
1432	Chief, Career Assistance	1445	Chief, Casualty Affairs	1429	Chief, O-J-T (Class II)
1433	Chief, OER-APR Section	1446	Chief, Personal Affairs (other)	1450	Chief, Career Progression
1434	Chief, Separations Section	1447	Chief, Records Section	1451	Chief, Classification & Training (II=PU)
1435	Chief, Promotion & Testing (Class II only)	1448	Chief, Airmen Records	1452	Chief, O-J-T (II=PU)
		1449	Chief, Officers Records	1453	Chief, Promotion & Testing (II=QF)

## V. RESULTS

As a part of the validation phase, LMDC travel teams sampled 4,786 individuals (military and civilian) at five bases representing six major commands. Table 6 lists information from the Background Section of the OAP and provides information in terms of the sample composition (e.g. grade levels, number of males and females, educational level, etc.). In addition, work hour stability, communication frequency, and career intentions are tabulated.

*Table 6. Background Data*

Variable Number	Description	Percent
<b>Your job requires how much communication between workers?</b>		
1	Very Little	.02
2	Little	.02
3	Moderate	.16
4	Very Frequent	.31
5	Almost Continuous	.49
<b>Which of the following best describes your career intentions?</b>		
6	To continue in the Air Force	.36
7	Will most likely continue in the Air Force	.13
8	May continue in the Air Force	.22
9	Planning to retire in the next 12 months	.06
10	Other	.24
<b>Your highest education level obtained was:</b>		
11	Non High School Graduate	.02
12	High School Graduate or GED	.39
13	Some College Work	.37
14	Bachelor's Degree	.09
15	Some Graduate Work	.06
16	Master's Degree	.07
17	Doctoral Degree	.01

Table 6 (*Continued*)

Variable Number	Description	Percent
<b>How stable are your work hours?</b>		
18	Highly Stable – Routine 8 hours a day	.31
19	Very Stable – Nearly routine 8 hour day	.29
20	Moderately Stable – Shift work which periodically changes	.14
21	Slightly Unstable – Irregular working hours	.14
22	Highly Unstable – Frequent TDYs, frequently on call	.13
<b>Your race is:</b>		
23	American Indian or Alaskan Native	.02
24	Asian or Pacific Islander	.01
25	Black, not of Hispanic Origin	.10
26	Hispanic	.05
27	White, not of Hispanic Origin	.78
28	Other	.04
<b>Your sex is:</b>		
29	Male	.86
30	Female	.14
<b>You are an:</b>		
31	Officer	.17
32	Airman	.66
33	Civilian (GS)	.12
34	Civilian (Wage Employee)	.05
35	Non-Appropriated Fund (NAF) Employee	.01
36	Others	.00
<b>Your grade level is:</b>		
37	1 – 3	.34
38	4 – 5	.37
39	6 – 7	.17
40	8 – 9	.05
41	10 – 12	.05
42	13 – 15	.02
43	16 or Higher	.00

#### Relationship of Background Data to Criteria

Tables 7 to 10 contain correlations of some Background Information items with the criteria of climate, satisfaction, and perceived productivity. Each table has a variable number listed (e.g., V 901) which identifies a given OAP item response, and by referring to the OAP (Appendix A), the format and specific wording of a given item can be identified.

Table 7 relates officer and airman status and work group participation to organizational climate. The data indicate that officers perceived organizational climate to be better than did airmen. Also, any

*Table 7. Correlation of Selected Background Data with Organizational Climate*

Background Data	Climate																						
	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124
901 Officer	.13	.05	.08	.11	.12	.07	.12	.11	.12	.15	.14	.08	.10	.16	.16	.14	.11	.05	.06	.13	.12	.06	.14
902 Airman	-.16	-.06	-.10	-.09	-.14	-.12	-.12	-.14	-.13	-.24	-.25	-.11	-.14	-.10	-.20	-.15	-.13	-.08	-.11	-.22	-.10	-.13	-.16
975 No work group meetings are used to solve problems and establish goals and objectives	-.20	-.15	-.16	-.19	-.25	-.18	-.19	-.24	-.24	-.24	-.22	-.22	-.21	-.26	-.26	-.20	-.21	-.20	-.23	-.22	-.18	-.18	-.18
977 Half the time work group meetings are used to solve problems and establish goals and objectives	.09	.06	.06	.07	.10	.07	.05	.09	.08	.10	.08	.08	.11	.10	.12	.11	.09	.08	.07	.09	.10	.06	.06
978 Almost all the time work group meetings are used to solve problems and establish goals and objectives	.09	.08	.09	.11	.13	.12	.10	.14	.13	.11	.13	.11	.11	.12	.10	.10	.10	.11	.12	.10	.10	.08	
986 Career intention is to continue in the Air Force	.18	.11	.14	.15	.20	.15	.17	.20	.20	.24	.28	.18	.17	.18	.23	.17	.14	.14	.17	.26	.21	.20	.15

perceived participation in work group meetings used to solve problems and establish goals and objectives was positively related to climate while the absence of such work group meetings was perceived negatively. Career intention of staying in the Air Force was positively related to the climate in an organization.

Table 8 relates to satisfaction background data relative to officer-airman status, who writes an individual's performance report, communications, use of group meetings to solve problems and set goals, and intent to remain in Air Force. The data indicate that the most satisfied group includes officers (vs. airmen), who have their performance reports written by their supervisor, have a job that requires constant communicating, and work in groups where their supervisor uses meetings to solve problems and set goals. In addition, those who are satisfied plan to continue in the Air Force.

*Table 8. Background/Satisfaction and Productivity*

Background Data	Job Satisfaction				
	705 Feeling of Helpfulness	714 Self- Improvement Opportunities	716 Work Itself	719 Acquired Valuable Skills	723 Job as a Whole
901 Officer	.08	.07	.10	.06	.06
902 Airman	-.12	-.06	-.21	-.12	-.18
958 Supervisor writes performance report	.15	.13	.13	.12	.15
959 Supervisor does not write performance report	-.15	-.13	-.13	-.12	-.15
974 Job requires continuous communication between workers	.15	.05	.15	.09	.11
975 Group meetings are not used to solve problems and establish goals	-.23	-.14	-.24	-.18	-.24
986 To continue in the Air Force	.24	.20	.27	.21	.29
990 Other (includes separation)	-.21	-.17	-.24	-.17	-.25

Table 9 relates perceived productivity to the same Background items related to satisfaction above. The same basic pattern appeared for productivity as for satisfaction. That is, those who perceive productivity to be high had their performance reports written by their supervisor, had a job requiring constant communication, and had supervisors who used group meetings to solve problems and set goals. Also, in this case, those planning on continuing in the Air Force perceived productivity to be higher than did others.

Table 10 relates to supervisor effectiveness, Background data relating to who writes an individual's performance report, whether a supervisor uses group meetings to solve problems and set goals, and the intent of the individual to remain in the Air Force: The data indicate that a supervisor is perceived effective if he writes an individual's performance report and uses group meetings to solve problems and set goals and if the person responding intends to remain in the Air Force.

Table 9. Background and Productivity

Background Data	Perceived Productivity				
	259 Quantity is high	260 Quality is high	261 Do outstanding job in crash programs	264 Maximum output from resources	265 Performance is high
901 Officer	.03	.03	.09	.04	.06
902 Airman	-.07	-.08	-.15	-.11	-.10
958 Supervisor writes performance report	.10	.12	.13	.14	.11
959 Supervisor does not write performance report	-.10	-.12	-.13	-.14	-.11
974 Job requires continuous communication between workers	.15	.11	.10	.11	.15
975 Group meetings are not used to solve problems and establish goals	-.16	-.20	-.20	-.19	-.19
986 To continue in the Air Force	.13	.16	.20	.16	.15
990 Other (includes separation)	-.08	-.11	-.14	-.12	-.12

**Table 10. Correlation of Selected Background Data with Supervisor Effectiveness**

Background Data	Supervisor Inventory Variables (See Appendix A)									
	V403	V404	V405	V406	V407	V408	V410	V411	V412	V414
V958 Supervisor writes performance reports	Ns <sup>a</sup>	.18	.17	.17	.18	.19	.16	.18	.16	.18
V959 Supervisor does not write performance report	Ns <sup>a</sup>	-.18	-.17	-.17	-.18	-.19	-.16	-.18	-.16	-.18
V975 Group meetings are not used to solve problems and establish goals and directives	-.15	-.25	-.24	-.30	-.32	-.26	-.30	-.26	-.25	-.23
V977 Half the time group meetings are used to solve problems and establish goals and directives	Ns <sup>a</sup>	.12	Ns <sup>a</sup>	.15	.15	.12	.14	Ns <sup>a</sup>	.12	.12
V978 Group meetings are totally used to solve problems and establish goals and directives	Ns <sup>a</sup>	.12	.13	.16	.18	.13	.16	.13	.14	.12
V986 Career intention is to remain in the Air Force	Ns <sup>a</sup>	Ns <sup>a</sup>	.16	.15	.17	.13	.15	.13	.14	.12
V990 Other ideas on career intentions	Ns <sup>a</sup>	-.15	-.17	-.14	-.15	-.13	-.14	-.14	-.12	-.12

<sup>a</sup>Ns = Not significant.

### Construct Validation

Construct validation was accomplished by factor analyses. Two series of orthogonally rotated factor analyses were performed: one overall, which included all items except for Background information items, and a second series of orthogonally rotated factor analyses—one for each section of the OAP. The overall factor analysis was to test the basic model to see if, in fact, the factors hypothesized associated with the Three Component Organizational Effectiveness Model were extracted.

Table 11 lists the 21 factors extracted during the overall factor analysis. As can be noted these variables do not include all hypothesized factors; however, they do fall well within the structure hypothesized for the basic Three Component Organizational Effectiveness Model.

Once the basic model structure was verified based on the overall factor analysis, a series of factor analyses by OAP section were performed. These analyses resulted in 22 factors being extracted. The factors extracted are listed in Table 12. The rationale for performing factor analysis by OAP section was that each section should be capable of standing alone as a separate survey which measured factors related to the area of concern (e.g. organizational climate). The overall factor analysis served to identify factors which had items loading from different sections. Items loading from two sections were deleted from one of them if that section was not the logical one. In turn, the section factor analysis established for each section those factors unique to it.

Table 13 is an abbreviated version of the overall factor analysis. It includes in descending order the variables with the highest factor loadings and their respective loadings. Table 14 lists for the OAP the factors isolated when each section was factor analyzed separately. It also has the factors and factor loadings

listed in descending order. In addition, the internal consistency of each factor was established by the Cronbach coefficient alpha (Cronbach, 1951) technique. The coefficient alpha internal consistency index is also listed beside each factor variable.

*Table 11. OAP Factor Analysis<sup>a</sup>*  
*(Rotated Factors)*

Factor	Section	Percent Total Variance <sup>b</sup>	Highest Loading	Loadings Above .50
1. Management - Supervision	M	17.89	.84	39
2. Organizational Climate	C	9.05	.74	21
3. Job Satisfaction	J/S	3.69	.68	5
4. Need for Enrichment	N	3.82	.85	8
5. Job Enrichment	J	3.52	.67	4
6. Productivity (Positive)	P/J	3.02	.72	7
7. Job Freedom	J	2.09	.71	3
8. Time Management	J	2.14	.77	4
9. Local Area-Social Satisfaction	S	1.47	.64	2
10. Skill-Goal-Task Variety	J	1.38	.62	2
11. Base Facilities	S	1.43	.86	3
12. Advancement	J	1.74	.66	3
13. Autonomous Control	M	1.54	.67	4
14. Goal Setting-Task Structure	M	.78	.27	0
15. Work Schedule-Job Security	S	.95	.46	0
16. Organizational Reward	C	.83	.30	0
17. Repetitive-Easy Task	N	1.15	.77	2
18. Productivity (Negative)	P	.97	.63	1
19. Equipment-Work Space	J/C	1.18	.68	2
20. Training	S	1.06	.62	2
21. Work Redundancy	J	1.21	.77	2

<sup>a</sup>Analysis included 149 variables.

<sup>b</sup>Total Variance = 60.90.

**Section Legend**

- C = Organizational Climate Inventory
- J = Job Inventory
- M = Supervisor Inventory
- N = Need for Enrichment (Job Inventory)
- P = Perceived Productivity Section
- S = Job Satisfaction Questionnaire

**Table 12. OAP Section Factor Analyses  
(Rotated Factors)**

Section/Factor	Percent Total Variance	Highest Loading	Loadings Above .50
<b>Job Inventory</b>			
Job Enrichment	12.24	.73	9
Freedom-Autonomy	6.34	.79	3
Time Management	6.82	.80	4
Supervisor Influence	7.33	.77	4
Advancement	4.95	.80	3
Work Group Performance	5.90	.74	3
Equipment—Work Space	3.90	.74	2
Work Repetition	4.11	.81	2
Task Accomplishment	4.06	.64	3
Total	55.70		
<b>Organizational Climate Inventory</b>			
General Climate	33.56	.76	17
Communications/Planning	24.62	.86	8
Total	58.18		
<b>Supervisory Inventory</b>			
Management-Supervision	30.56	.77	27
Supervisor Assistance/Feedback	26.51	.76	20
Autonomous Control	5.59	.69	4
Total	62.63		
<b>Need for Enrichment (NEI)</b>			
Meaningful-Responsible Work	49.17	.87	8
Repetitive-Easy Job	15.92	.85	2
Total	65.09		
<b>Perceived Productivity</b>			
High Productivity	43.82	.83	5
Performance Disruption	17.51	.78	2
Total	61.32		
<b>Job Satisfaction</b>			
General Satisfaction	36.50	.77	16
Base Facilities	8.70	.79	3
Training	5.37	.53	2
Local Area—Social	5.17	.67	2
Total	55.74		

**Table 13. OAP Detailed Factor Analysis**

Variable	Loading	Variable	Loading	Variable	Loading
<b>Management/ Supervision</b>		<b>General Organizational Climate</b>		<b>Job Related Satisfaction</b>	
440	.84	110	.74	243	.68
412	.81	109	.74	244	.67
427	.81	113	.72	723	.66
404	.80	104	.71	716	.64
435	.80	107	.69	215	.63
429	.80	103	.67	710	.47
423	.79	114	.67	719	.46
425	.78	106	.67	121	.45
424	.78	111	.65	111	.44
438	.78	120	.65	112	.38
<b>Need for Enrichment</b>		<b>Task Characteristics</b>		<b>Perceived Productivity (+)</b>	
252	.85	210	.67	260	.72
251	.83	203	.66	265	.68
254	.83	202	.56	261	.66
253	.82	209	.51	238	.58
250	.81	211	.49	259	.57
257	.65	217	.49	264	.57
249	.63	205	.48	237	.51
256	.63	201	.47	236	.44
212	.18	220	.46	709	.40
201	.18	212	.44	117	.35
<b>Task Autonomy</b>		<b>Time Management</b>		<b>Local Area/Social Satisfaction</b>	
213	.71	224	.77	707	.64
204	.69	223	.65	708	.55
214	.60	225	.60	714	.41
248	.44	222	.57	706	.32
249	.35	219	.38	704	.30
205	.33	229	.38	709	.30
717	.32	231	.33	705	.29
209	.29	232	.32	715	.28
211	.27	235	.30	710	.24
443	.27	204	.21	713	.23
<b>Skill/Goal/Task Variety</b>		<b>Base Facilities</b>		<b>Advancement/ Recognition</b>	
218	.62	721	.86	239	.66
228	.57	720	.76	234	.62
212	.44	722	.70	240	.51
201	.43	707	.20	241	.41
206	.34	219	.15	704	.37
220	.33	719	.14	233	.28
217	.29	708	.12	115	.27
230	.28	718	.11	102	.25
202	.27	715	.10	714	.24
221	.27	714	.10	237	.23

Table 13 (*Continued*)

Variable	Loading	Variable	Loading	Variable	Loading
<b>Supervisor Rigidity</b>		<b>Task Structure</b>		<b>Job Related Satisfaction</b>	
419	.67	403	.27	717	.46
417	.64	415	.26	718	.38
421	.60	405	.25	229	.28
415	.52	413	.23	714	.26
246	.28	437	.22	715	.24
434	.28	436	.21	439	.24
248	.24	217	.20	247	.22
425	.22	435	.20	237	.21
422	.20	220	.20	719	.20
403	.19	404	.19	236	.18
<b>Organizational Reward</b>		<b>Desired Repetitive/ Easy Tasks</b>		<b>Perceived Productivity (-)</b>	
115	.30	255	.77	263	.63
122	.28	258	.76	262	.49
241	.28	219	.22	206	.35
233	.25	228	.18	259	.25
237	.24	256	.18	717	.23
417	.24	226	.16	230	.20
236	.22	250	.16	715	.19
116	.21	251	.15	236	.18
104	.20	254	.14	709	.15
422	.19	715	.13	242	.15
<b>Equipment/ Work Space</b>		<b>Job Related Training</b>		<b>Work Repetition</b>	
207	.68	712	.62	227	.78
208	.65	711	.54	226	.75
124	.48	242	.38	228	.34
211	.22	436	.22	225	.29
209	.20	103	.21	223	.18
262	.18	104	.19	255	.16
103	.17	713	.18	203	.15
216	.14	719	.18	202	.14
104	.13	216	.16	235	.13
206	.13	706	.15	417	.13

Table 14. OAP Sections Detailed Factor Analyses

Var.	Loading	Alpha	Var.	Loading	Alpha	Var.	Loading	Alpha	Var.	Loading	Alpha
Situational Environment											
<b>Job Enrichment</b>			<b>Task Autonomy</b>			<b>Planning and Time Management</b>			<b>Supervisor Influence<sup>a</sup></b>		
215	.73		213	.79		224	.80		247	.77	
244	.70	.86d	204	.78	.81d	223	.68	.71d	246	.74	.79
210	.63	.79d	214	.67	.83d	225	.61	.71d	245	.74	.84
203	.61	.81d	248	.49	.84d	222	.59	.70d	248	.60	.86
201	.58	.82d	205	.41	.84	219	.45	.70d	216	.44	.84
212	.54	.84d	209	.36	.86	229	.39	.71d	241	.38	.85
230	.52	.85d	211	.35	.86	232	.36	.73d	217	.31	.85
209	.51	.86d	246	.28		231	.35	.76d	244	.31	.86
217	.49	.87d	231	.28		235	.35	.78d	220	.27	
202	.49	.87d	202	.25		241	.25		236	.26	
<b>Advancement/Recognition</b>			<b>Equipment/Work Space/Goal Clarity<sup>b</sup></b>			<b>Work Repetition</b>			<b>Task Accomplishment<sup>c</sup></b>		
239	.80		208	.74		226	.81		218	.64	
240	.64	.69d	207	.65	.53d	227	.80	.71d	206	.52	.32d
234	.61	.69d	220	.34	.56	228	.47	.62	228	.51	.40d
241	.48	.75d	211	.33	.62	225	.23		212	.42	.46d
233	.27		209	.30	.70	244	.22		201	.41	.58d
231	.21		217	.30	.75	215	.17		202	.32	.62d
235	.21		221	.28		223	.17		230	.31	.68d
244	.20		233	.26		206	.17		220	.27	
219	.19		202	.22		202	.16		221	.27	
221	.19		234	.21		203	.15		217	.22	
Supervisory Inventory											
<b>Management/Supervision</b>			<b>Supervisor Assistance/Feedback</b>			<b>Autonomous Autonomous Control<sup>c</sup></b>					
404	.77		435	.76		421	.69				
412	.76	.86d	437	.74	.85d	419	.65	.53d			
413	.73	.89d	442	.73	.87d	415	.56	.51d			
416	.72	.90d	433	.71	.91d	417	.56	.58d			
411	.72	.91d	431	.71	.92	434	.35	.55			
414	.71	.93d	436	.69	.92	425	.31	.60			
405	.70	.93d	429	.68	.93	422	.29	.66			
410	.68	.94d	438	.67	.94	443	.29				
440	.68	.95	428	.66	.95	403	.28				
406	.67	.95	427	.62	.95	426	.26				
Organization Climate Inventory											
<b>General Organizational Climate</b>			<b>Organizational Communications Climate</b>			<b>High Productivity</b>			<b>Performance Distribution</b>		
111	.76		104	.86		260	.83		262	.78	
121	.75	.82d	103	.84	.88d	265	.80	.74d	263	.77	.34
110	.73	.85d	105	.71	.86d	261	.78	.80d	259	.16	
122	.71	.87d	107	.67	.87d	259	.72	.81d	264	.05	
109	.69	.90d	113	.61	.89d	264	.71	.82d	260	.05	
112	.69	.90d	124	.59	.89	263	.24		261	.01	
116	.66	.91d	106	.52	.90	262	.23		265	.01	
115	.66	.92d	102	.51	.91						
117	.66	.92d	120	.48	.91						
114	.61	.93d	109	.44	.92						
			114	.44	.93						
Perceived Productivity											

Table 14 (Continued)

Var.	Loading	Alpha	Var.	Loading	Alpha	Var.	Loading	Alpha	Var.	Loading	Alpha
Job Satisfaction											
<b>Job Related Satisfaction</b>			<b>Local Area/Social Satisfaction<sup>b</sup></b>			<b>Training</b>			<b>Base Facilities</b>		
717	.75		707	.81		711	.80		721	.86	
723	.72	.62d	708	.69	.63d	712	.79	.71d	720	.78	.75d
716	.69	.78d	706	.45	.64	704	.45	.67	722	.71	.74d
718	.68	.79d	705	.39	.72	713	.43	.73	707	.20	
719	.63	.82d	709	.36	.75	705	.39	.77	715	.18	
710	.56	.84d	714	.35	.77	709	.38	.80	704	.17	
715	.52	.85d	704	.33	.80	706	.35	.82	714	.16	
705	.50	.86d	713	.28		716	.31	.84	718	.14	
713	.50	.87d	716	.28		719	.31	.86	717	.14	
714	.42	.88d	710	.27		723	.29		711	.12	
Need for Enrichment											
<b>Meaningful/ Responsible Work</b>			<b>Desired Repetitive/ Easy Tasks</b>								
252	.87		255	.86							
253	.84	.85d	258	.83	.64						
251	.84	.88d	254	.22							
250	.83	.91d	251	.19							
254	.82	.92d	250	.18							
249	.69	.92	256	.14							
256	.68	.92	252	.13							
257	.66	.91	253	.09							
255	.10		249	.04							
258	.05		257	.04							

<sup>a</sup>This factor recommended for deletion since in the overall OAP factor analysis variables listed here load on factor in the Supervisor Inventory.

<sup>b</sup>Recommend deletion since internal consistency index is low for variables recommended for inclusion. Additional variables not recommended for inclusion since they do not logically relate to the factor.

<sup>c</sup>This factor is weak in terms of internally consistency. Should this factor be included, additional items to strengthen it is recommended.

<sup>d</sup>Recommended for inclusion.

## VI. RECOMMENDATIONS

The purpose of this research was to develop an organizational assessment package for operational use by LMDC. Recommendations for implementation of an operational OAP fall into two categories. First, the operational version based on analysis, has to be established. Second, development of computer output useful to LMDC consultants needs to be programmed.

### Operational OAP

Recommendations for an operational OAP are based on factor analyses provide in Tables 13 and 14. Table 14 lists OAP factors and their respective coefficient alphas. Although the cutting point for inclusion of items for a given factor is somewhat arbitrary, a recommendation is indicated in Table 14. Those variables recommended for inclusion are identified by the letter d. For example, within the Management Style area, the factor Management-Supervision has eight items with d's—the last item suggested for inclusion, Variable 410, has a factor loading of .68 and an alpha of .94.

The suggested method for reducing the total number of items in the OAP involved (a) identifying OAP factors, (b) ordering them in terms of their descending factor loadings, (c) computing coefficient alpha iteratively starting with first two highest loading items, and (d) selecting a sub-set of items for each factor which taken together provide a reliable measure of the factor.

Those factors which are reliable (i.e., above a coefficient alpha = .70) were generally recommended to be included in the operational OAP. For those falling below this level, it was recommended to LMDC that additional items be written in order to increase the factor reliability or to delete the factor from the OAP.

Based on the factor analysis data, those factors with low loadings were identified for an additional test. This test ( $n = 72$ ) involved writing new items associated with the area, retesting, and computing coefficient alphas. Appendix B contains the retest OAP and Table 15 the coefficient alphas associated with the OAP retest. During the retest, a few factors falling above the minimum reliability cutting point were added to try to increase the reliability of these factors.

*Table 15. Coefficient Alphas Associated with OAP Retest*

Var.	Alpha	Var.	Alpha	Var.	Alpha	Var.	Alpha
<b>Performance Disruption</b>		<b>Repetitive/Easy Job</b>		<b>High Productivity</b>		<b>Advancement</b>	
262		255		259		234	
263	.6643	258	.7170	260	.6790	239	.5944
315	.6940	311	.4750	261	.8012	240	.6037
317	.6174	312	.5319	264	.8341	241	.6614
318	.6120			265	.8613	306	.7486
				313	.7793		
				314	.7619		
				316	.7582		
<b>Work Repetition</b>		<b>Equipment/Work Space</b>		<b>Task Accomplishment</b>		<b>Autonomous Control</b>	
226		207		201		415	
227	.5204	208	.6072	202	.7329	417	.4727
228	.5723	209	.6121	206	.7107	419	.6156
307	.7176	211	.6650	212	.7951	421	.7400
		217	.7543	218	.8092	317	.7937
		220	.7896	228	.8245	318	.8183
		301	.8079	230	.8108	319	.8460
		302	.8231	308	.8333		
		303	.8386	309	.8563		
		304	.8319	310	.8771		
		305	.8279				

Based on the initial factor analyses the following factors were identified as having low reliability indices: (a) autonomous control, (b) work repetition, (c) task accomplishment, (d) performance disruption, and (e) desired repetitive-easy tasks. In addition, the following factors had additional items written for OAP retest; (a) advancement/recognition, (b) equipment-work space, and (c) work repetition.

In Table 15, the 300-series variables (e.g., 315) represent the new items added to increase the reliability. Five of the factors had their coefficient alphas increased by adding additional items.

The factors recommended for inclusion in the final OAP are listed in Table 16. Factors recommended for deletion included (a) supervisor influences, (b) work group performance, (c) performance disruption, (d) local area—social satisfaction, and (e) desired repetitive-easy tasks. Supervisor influence and work group performance were recommended to be deleted since the overall factor analysis indicated that supervisor influence was redundant with the management-supervision factor, and work group performance was redundant with the high productivity factor. The two remaining factors were recommended for deletion due to low reliability indices.

*Table 16. Factors Recommended for Inclusion in Operational OAP*

Factors	Factors
1. Management – Supervision	10. Task accomplishment
2. Supervisor Assistance/Feedback	11. General Organizational Climate
3. Autonomous Control	12. Organizational Communications Climate
4. Job Enrichment	13. High Productivity
5. Freedom/Autonomy	14. Job Related Satisfaction
6. Time Management	15. Base Facilities
7. Advancement – Recognition	16. Job Related Training
8. Equipment – Work Space	17. Meaningful – Responsible Work
9. Work Repetition	

#### Printouts

The data collected on a large scale, such as from an Air Force base, need to be aggregated in some meaningful way. The following output format categories are recommended as a means of efficiently using the data.

LMDC travel teams usually contain 10 to 15 individuals. With these resources and a large amount of data, it appears reasonable to output in rank order those work groups who, in some sense, range from the worst to the best. A printout of this type would permit team personnel to select those work groups needing the most attention and focus on them. In addition, the printout should permit each work group to be rated on each factor. Table 17 is an example of a recommended printout format for aggregating data for an Air Force base. As can be noted, the work groups are listed in rank order from worst to best based on an overall work group indicator. Each group in turn has its factor indices provided. A team member using this format can identify those work groups needing attention, find those factors which are weakest, and focus on the factor area presenting a problem for a given work group.

Once a work group has been identified as a candidate for further attention, a detailed printout will provide more specific data for team members. Table 18 is an example of a detailed printout. For a given work group, each OAP item has been presented with its valid (and invalid) N; the frequency and percent response for each response option; the mean, median, and standard deviations. In addition, it is recommended that the end of the printout include a section containing the generated variables, such as job enrichment indices, for the given work group.

Another printout type is presented in Table 19. The printout breaks out across a base (or any other aggregate group) background information categories and permits comparison for each OAP item. This example breaks out for each Air Force Specialty Code (AFSC) category each OAP item and its associated total N, valid N, mean, and standard deviation. This printout type permits comparisons to be made on background items across a large group, such as the population of an Air Force base.

*Table 17. Printout Format for Aggregating Work Group Factors*

		Overall AFB Indicator 4.01					
Work Group Indicator		General Climate	Autonomous Control	Job Enrichment	Freedom/Autonomy	Time Management	.
Work Group	Number Cases	.	.	.	.	.	.
0001	6	1.01	1.05	1.50	1.40	1.62	1.32
0002	X	X.XX	X.XX	X.XX	X.XX	X.XX	2.45
0003	X	X.XX	X.XX	X.XX	X.XX	X.XX	3.75
0004	X	X.XX	X.XX	X.XX	X.XX	X.XX	4.75
0005	X	X.XX	X.XX	X.XX	X.XX	X.XX	5.01
0006	X	X.XX	X.XX	X.XX	X.XX	X.XX	7.00

**Table 18. Detailed Printout Format for Individual Work Group**

Organization Assessment Program (OAP) Summary

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**Table 19. Printout Format for Aggregating Background Information**

DEP INTERACTION SUMMARY FOR ALL AFH's											
COLLAPSED AIRMAN AFH'S											
VAN	MEAN	S.D.	MEAN	S.D.	MEAN	S.D.	MEAN	S.D.	MEAN	S.D.	MEAN
ALL 76*5	34 6 75*5	47 6 60*3	57 6 59*5	ALL 27 6 46*5	ALL 31 6 44*5	ALL 40*533	1*64*5	ALL 61 6 62*5	ALL 54 6 58*5	ALL 24*5	ALL 54 6 58*5
n = 12	n = 63	n = 56	n = 14	n = 50	n = 60	n = 44	n = 44	n = 60	n = 44	n = 154	
102 3*0533 1*6522 1*62381 1*5923 1*75107 1*6364 1*6707 3*8571 1*4569 3*97001 1*5652 4*0533 1*6960 4*0562 1*8182 1*7450											
103 3*75102 1*9203 1*65875 1*8711 1*6361 1*6710 3*8571 1*8571 1*8694 4*0701 1*6643 4*05667 1*4416 4*0773 1*7753 3*9740 1*6275											
104 3*25601 1*6394 1*9603 1*6394 1*7074 1*5691 1*3596 4*3571 1*6736 4*06602 1*5625 4*07167 1*5205 4*07727 1*6769 3*9545 1*5473											
105 4*5533 1*7754 1*7154 1*6551 1*8147 1*6519 4*7857 1*8197 5*1300 1*5740 5*1300 1*3540 5*4316 1*4678 4*5844 1*5106											
106 3*6667 1*9314 1*6492 1*7627 4*0797 1*7297 3*1420 2*0304 4*4993 1*7493 4*3167 1*5663 4*6364 1*7721 3*8052 1*5998											
107 3*9167 2*0191 1*4127 1*6363 1*6591 1*6065 4*3571 1*5610 4*0700 1*6357 4*0733 1*6928 4*0409 1*6229 3*9675 1*6133											
108 3*9167 2*2691 1*5556 1*7162 4*7455 1*8411 4*0000 1*6127 4*3401 1*3934 4*0733 1*7768 4*6591 1*6715 4*1818 1*5649											
109 3*3333 2*1594 1*9286 1*9495 1*4915 1*7360 3*9266 1*6675 4*0701 1*7526 4*1633 1*6641 4*3182 1*9161 3*9221 1*6017											
110 3*6667 2*1731 1*4573 1*9273 1*6363 1*7695 4*0714 1*7511 4*0810 1*9183 4*0600 1*5620 4*5979 1*6988 4*0455 1*7333											
111 4*00910 2*0617 1*6964 1*7165 4*5611 1*9511 3*6429 2*1583 4*7801 1*7238 4*0667 1*6275 4*7723 1*9228 4*4156 1*8223											
112 4*7500 2*2417 1*5231 1*6151 1*7172 4*5714 2*1265 5*4205 4*5433 1*6611 4*5433 1*2667 5*6591 1*6229 5*1753 1*5878											
113 3*9167 2*0191 1*6556 1*7520 4*6917 1*5490 4*3571 1*3420 4*0700 1*7464 4*0450 1*4003 4*7955 1*5460 4*3182 1*5664											
114 3*25601 2*2032 4*0635 1*6365 1*9059 1*8131 3*3571 1*3447 3*8600 1*8112 3*5667 1*6265 4*1591 1*9062 3*6234 1*6399											
115 3*8333 1*9072 1*7143 1*7143 1*7143 1*7143 1*7143 1*7143 1*7143 1*7143 1*7143 1*7143 1*5510 4*0682 1*7817 4*5714 1*6351											
116 3*9167 2*1592 1*4762 1*6101 3*2773 1*6634 1*2857 1*5320 4*2201 1*8743 4*3667 1*3400 4*4091 1*7751 4*0714 1*6900											
117 4*2500 1*9632 1*7937 1*7477 1*0727 1*8671 4*1429 1*8444 4*5201 1*9104 4*8333 1*4510 4*4502 4*4316 1*8757 4*3571 1*6775											
118 3*5633 1*9415 1*6797 1*6797 1*6797 1*6797 1*7796 4*0000 1*5584 4*1300 1*7574 4*2613 1*6842 4*1591 1*7444 4*2193 1*6235											
119 4*1067 1*9501 1*6399 4*6187 1*7437 4*0000 1*7437 4*0280 1*8721 4*3603 1*6839 4*7167 1*6742 4*0227 1*9998 4*5449 1*6707											
120 4*2500 2*0964 1*6670 1*6670 1*6670 1*6670 1*5571 1*3571 1*9126 5*0401 1*5869 5*0667 1*4476 4*9545 1*6231 4*5390 1*4146											
121 4*543 2*2154 1*6532 1*6532 1*6532 1*6532 1*6791 1*6791 1*66429 1*6749 5*2800 1*68557 5*0167 1*4999 5*1364 2*0404 4*7922 1*6383											
122 3*0433 1*6965 4*6565 1*6565 1*6565 1*6565 1*6565 1*6565 1*7613 1*7613 4*1601 1*8370 4*2167 1*5502 3*8409 2*1100 4*0584 1*6719											

The above are examples which should reduce a large data base to a more meaningful form for operational users. One major question remaining is how are factors aggregated to yield an overall work group indicator score. There are several techniques worth considering. One is simple unit weighting of each factor and summing factors. Another scheme is in terms of factor weightings. A third is in terms of expert opinion derived through policy capturing techniques (Hoffman, 1960). Whichever technique is used, it should have support from the user. Therefore, policy capturing, simple unit weighting, and factor weighting are worth consideration.

## VII. CONCLUSIONS

The development of an OAP to serve as LMDC's primary survey instrument for identifying organizational problem areas has been presented. The survey was developed within a management contingency model, which views organizational effectiveness to be a function of the manager, the situational environment, and the criterion of success. Research on the data base accumulating from administration of the OAP will serve as a basis for probing the dynamics of organizations. Resulting organizational data should provide a better understanding of organizations, their characteristics, and the managers' role in increasing organizational effectiveness.

## REFERENCES

Cronbach, L.J. Coefficient alpha and the internal structure of tests. *Psychometrika*, 1951, 16(3), 297-334.

Gould, R.B. *Air Force occupational attitude inventory development*. AFHRL-TR-78-60, AD-A062 987. Brooks AFB, TX: Occupation and Manpower Research Division, Air Force Human Resources Laboratory, October 1978.

Hackman, J.R., Oldham, G., Janson, R., & Purdy, K. A new strategy for job enrichment. *California Management Review*, 1975, 17(4), 57-71.

Hendrix, W.H. *Contingency approaches to leadership: A review and synthesis*. AFHRL-TR-76-17, AD-A028 485. Lackland AFB, TX: Occupational and Manpower Research Division, Air Force Human Resources Laboratory, June 1976.

Hendrix, W.H. *Initial development of an organizational assessment package*. Paper presented at the 19th Annual Military Testing Association Conference, San Antonio, Texas, October 1977.

Hoffman, P.J. The paramorphic representation of clinical judgement. *Psychological Bulletin*, 1960, 57(2), 116-131.

Tuttle, T.C., Gould, R.B., & Hazel, J.T. *Dimensions of job satisfaction: Initial development of the Air Force occupational attitude inventory*. AFHRL-TR-75-1, AD-A014 796. Lackland AFB, TX: Occupational and Manpower Research Division, Air Force Human Resources Laboratory, June 1975.

## **APPENDIX A: ORGANIZATIONAL ASSESSMENT PACKAGE (VERSION 3)**

The Organizational Assessment Package (OAP) is a series of surveys for collecting information about you, your job, your work group, your supervisor, and your organization.

The terms **work group**, **organization**, and **supervisor** are used throughout the OAP and need some clarification. The term **work group** refers to a group of individuals working for the same supervisor, while the term **organization** refers to the overall organizational unit. For example, if your position is within a section of a squadron then the squadron would be your organization and your section would be your work group.

With the exception of the Background Information Section, two types of scales are used in the OAP. Most surveys will have a seven point (1 - 7) scale; however, three inventories will include a zero point (0 - 7) which should be marked if an item is non-applicable. Mark your answers on the separate answer sheet provided. **Please use a number 2 pencil only.** Make heavy black marks that fill the oval-shaped space. For example, using the scale below, if you **moderately agree** with item statement 1 then you would blacken oval number 6 on the answer sheet as shown in the example below.

### **Scale:**

0 = Not applicable	4 = Neither agree nor disagree
1 = Strongly disagree	5 = Slightly agree
2 = Moderately disagree	6 = Moderately agree
3 = Slightly disagree	7 = Strongly agree

### **Item Statement**

1. The information your work group receives from other work groups is helpful.

### **Answer Response:**

( )      001      (1)      (2)      (3)      (4)      (5)            (7)

Should the above statement not be applicable for you then you would mark the unnumbered oval as shown below.

### **Answer Response:**

     002      (1)      (2)      (3)      (4)      (5)      (6)      (7)

It is important that you answer **all** items honestly. Only in this way can an accurate description of your organization be obtained.

Summary results only describing your organization will be provided to your organization. In turn, your organization will have the opportunity to present the results to you and discuss them. Your individual responses are confidential, and will not be provided to your organization or any other agency. Only those individuals performing this research will have access to your completed OAP.

**DO NOT STAPE OR OTHERWISE DAMAGE THE ANSWER SHEET.**

**PRIVACY ACT STATEMENT**

1. Authority: 10 USC 8012, Secretary of the Air Force, Powers, Duties, Delegation by Compensation E.O. 9397, 22 Nov 43, Numbering System for Federal Accounts Relating to Individual Persons.
2. PRINCIPAL PURPOSE(S): This information will be used for Air Force research and development purposes and for organizational problem area identification.
3. ROUTINE USES: Information provided by respondents will be treated **confidentially** and will be used for official research purposes and organizational problem area identification. Information obtain will also be used to improve instruments and techniques for organizational assessment.
4. WHETHER DISCLOSURE IS MANDATORY OR VOLUNTARY AND EFFECT ON INDIVIDUAL OF NOT PROVIDING INFORMATION: Disclosure of this information is voluntary. The Air Force continues to improve only with your assistance to make additional refinements in management of its resources. Your cooperation in this effort is appreciated.

**BACKGROUND INFORMATION****Instructions**

The first section of this survey concerns your background. Please use the separate answer sheet and darken the oval which corresponds to your response to each question.

1. You are an:  
(901)\* 1. Officer (904) 4. Civilian (Wage Employee)  
(902) 2. Airman (905) 5. Non-Appropriated Fund (NAF) Employee  
(903) 3. Civilian (GS) (906) 6. Others
2. Your grade level is:  
(907) 1. 1-3 (911) 5. 10-12  
(908) 2. 4-5 (912) 6. 13-15  
(909) 3. 6-7 (913) 7. 16 or Higher  
(910) 4. 8-9
3. Total months in this organization is:  
(914) 1. Less than 1 month.  
(915) 2. More than 1 month, less than 6 months.  
(916) 3. More than 6 months, less than 12 months.  
(917) 4. More than 12 months, less than 18 months.  
(918) 5. More than 18 months, less than 24 months.  
(919) 6. More than 24 months, less than 36 months.  
(920) 7. More than 36 months.

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\*Number in parenthesis identifies variable for reference only.

4. Total months experience in present job is:

- (921) 1. Less than 1 month.
- (922) 2. More than 1 month, less than 6 months.
- (923) 3. More than 6 months, less than 12 months.
- (924) 4. More than 12 months, less than 18 months.
- (925) 5. More than 18 months, less than 24 months.
- (926) 6. More than 24 months, less than 36 months.
- (927) 7. More than 36 months.

5. Your race is:

- (928) 1. American Indian or Alaskan Native
- (929) 2. Asian or Pacific Islander
- (930) 3. Black, not of Hispanic Origin
- (931) 4. Hispanic
- (932) 5. White, not of Hispanic Origin
- (933) 6. Other

6. Your sex is:

- (934) 1. Male
- (935) 2. Female

7. Your highest educational level obtained was:

- (936) 1. Non high school graduate
- (937) 2. High School graduate or GED
- (938) 3. Some college work
- (939) 4. Bachelor's degree
- (940) 5. Some graduate work
- (941) 6. Master's degree
- (942) 7. Doctoral degree

8. Highest level of professional military education (residence or correspondence):

(943) 0. None or not applicable	(946) 3. NCO Academy (Phase 4)
(944) 1. NCO Orientation Course or USAF Supervisor Course (NCO Phase 1 or 2)	(947) 4. Senior NGO Academy (Phase 5)
(945) 2. NCO Leadership School (NCO Phase 3)	(948) 5. Squadron Officer School
	(949) 6. Intermediate Service School (Officer)
	(950) 7. Senior Service School (Officer) (i.e., Air War College)

9. How many people do you directly supervise (i.e., those you write performance reports for)

(951) 1. None	(955) 5. 9 to 12
(952) 2. 1 to 2	(956) 6. 13 to 20
(953) 3. 3 to 5	(957) 7. 21 or more
(954) 4. 6 to 8	

10. Does your supervisor actually write your performance report?

- (958) 1. Yes
- (959) 2. No

11. Your work requires you to work primarily:

- (960) 1. Alone
- (961) 2. With one or two people
- (962) 3. As a small group team member
- (963) 4. As a large group team member (6 or more people)
- (964) 5. Other

12. How stable are your work hours?

- (965) 1. Highly Stable - Routine 8 hours a day
- (966) 2. Very Stable - Nearly routine 8 hour day
- (967) 3. Moderately Stable - Shift work which periodically changes
- (968) 4. Slightly Unstable - Irregular working hours
- (969) 5. Highly Unstable - Frequent TDYs, frequently on call

13. Your job requires how much communication between workers?

(970) 1. Very little	(973) 4. Very frequent
(971) 2. Little	(974) 5. Almost continuous
(972) 3. Moderate	

14. To what extent in your work group are group meetings used to solve problems and establish goals and objectives?

(975) 1. None	(977) 3. About half the time
(976) 2. Occasionally	(978) 4. Almost totally

15. Your work schedule is basically:

- (979) 1. Shift work, usually days.
- (980) 2. Shift work, usually swing shift.
- (981) 3. Shift work, usually nights.
- (982) 4. Shift work, usually days and nights.
- (983) 5. Daily work only.
- (984) 6. Crew schedule.
- (985) 7. Other.

16. Which of the following best describes your career intentions?

- (986) 1. To continue in the Air Force.
- (987) 2. Will most likely continue in the Air Force.
- (988) 3. May continue in the Air Force.
- (989) 4. Planning to retire in the next 12 months.
- (990) 5. Other

## JOB INVENTORY

### Instructions

Below are items which relate to your job. Read each statement carefully and then decide to what extent the statement is true of your job. Indicate the extent that the statement is true for your job by choosing the statement below which best represents your job.

1 = Not at all	5 = To a fairly large extent
2 = To a very little extent	6 = To a great extent
3 = To a little extent	7 = To a very great extent
4 = To a moderate extent	

Select the corresponding number for each question and enter it on the separate answer sheet.

### PART I: THE JOB ITSELF

- (201) 17. To what extent does your job require you to do many different things, using a variety of your talents and skills?
- (202) 18. To what extent does your job involve doing a **whole** task or unit of work?
- (203) 19. To what extent is your job significant, in that it affects others in some important way?
- (204) 20. To what extent does your job provide an great deal of freedom and independence in scheduling your work and selecting your own procedures to accomplish it?
- (205) 21. To what extent does just doing your job provide you with chances to find out how well you are doing?
- (206) 22. To what extent do **additional duties** interfere with the performance of your primary job?
- (207) 23. To what extent do you have adequate tools and equipment to accomplish your job?
- (208) 24. To what extent is the amount of work space provided adequate?
- (209) 25. To what extent does your job provide the chance to know for yourself when you do a good job; and to be responsible for your own work?
- (210) 26. To what extent does doing your job well affect a lot of people?
- (211) 27. To what extent does your job provide you with the chance to finish completely the piece of work you have begun?
- (212) 28. To what extent does your job require you to use a number of complex skills?
- (213) 29. To what extent does your job give you freedom to do your work as you see fit?
- (214) 30. To what extent are you allowed to make the major decisions required to perform your job well?
- (215) 31. To what extent are you proud of your job?
- (216) 32. To what extent do you feel accountable to your supervisor in accomplishing your job?
- (217) 33. To what extent do you know exactly what is expected of you in performing your job?
- (218) 34. To what extent are your job performance goals difficult to accomplish?
- (219) 35. To what extent are staff assistance visits helpful in achieving job performance?
- (220) 36. To what extent are your job performance goals clear and specific?
- (221) 37. To what extent are your job performance goals realistic?

1 = Not at all                            5 = To a fairly large extent  
2 = To a very little extent            6 = To a great extent  
3 = To a little extent                 7 = To a very great extent  
4 = To a moderate extent

(222) 38. To what extent do you use Management Information Systems(e.g., Computer Printouts, reports, etc.) to make decisions in your job?

(223) 39. How much of your time is used for planning more than 6 months ahead?

(224) 40. How much of your time is used for weekly or monthly planning?

(225) 41. How much of your time is used for daily planning?

(226) 42. To what extent do you perform the same tasks repeatedly within a short period of time?

(227) 43. To what extent are you faced with the same type of problem on a weekly basis?

(228) 44. To what extent are tasks you perform easy to accomplish?

(229) 45. To what extent is planning modified to meet changing job related needs? Changing environment?

(230) 46. To what extent does your job keep you busy?

(231) 47. To what extent are the people affected by decisions asked for their ideas?

(232) 48. To what extent is the amount of information you get from other work groups adequate to meet your job needs?

(233) 49. To what extent do you know what the objectives of your organization are?

(234) 50. To what extent are you aware of promotion/advancement opportunities that affect you?

(235) 51. To what extent is your work group involved in establishing goals?

(236) 52. To what extent does your work group solve problems effectively?

(237) 53. To what extent does your work group perform effectively under pressure?

(238) 54. To what extent do coworkers in your work group maintain high standards of performance?

(239) 55. To what extent do you have the opportunity to progress up your career ladder?

(240) 56. To what extent are you being prepared to accept increased responsibility?

(241) 57. To what extent do people who perform well receive recognition?

(242) 58. To what extent do you feel adequately trained to perform your assigned tasks?

(243) 59. To what extent are you satisfied with your job?

(244) 60. To what extent does your work give you pride and feeling of self-worth?

(245) 61. To what extent does your supervisor provide the assistance you need to manage your work?

(246) 62. My supervisor asks for ideas before making decisions.

(247) 63. To what extent does your supervisor encourage the people in your work group to work as a team?

(248) 64. To what extent does your supervisor allow you to make decisions concerning your job?

### **Instructions**

Below are statements which deal with job characteristics. Some of these may not be in your job now. However, read each statement below and choose the answer which best represents how much **you would like to have each characteristic in your job.**

In my job, I would like to have the **characteristics described:**

1 = A slight amount	5 = A large amount
2 = An average amount	6 = A very large amount
3 = A moderate amount	7 = An extremely large amount
4 = A fairly large amount	

- (249) 65. Opportunities to have independence in my work.
- (250) 66. A job that is meaningful.
- (251) 67. The availability for personal growth in my job.
- (252) 68. Opportunities in my work to use my skills.
- (253) 69. Opportunities to perform a variety of tasks.
- (254) 70. Opportunities in my work to learn new and exciting things.
- (255) 71. A job in which tasks are repetitive.
- (256) 72. Opportunities to keep busy in my work.
- (257) 73. The opportunity to perform all tasks or jobs in my career field from time to time.
- (258) 74. A job in which tasks are relatively easy to accomplish.

### **PERCEIVED PRODUCTIVITY**

### **Instructions**

The statements below deal with the output of your work group. For some jobs certain statements may not be applicable. Should this be the case for your work group, then you should select the **not applicable** statement coded "0" below. Indicate your agreement with the statement by selecting the answer which best represents your attitude concerning your work group.

0 = Not applicable	4 = Neither agree nor disagree
1 = Strongly disagree	5 = Slightly agree
2 = Moderately disagree	6 = Moderately agree
3 = Slightly disagree	7 = Strongly agree

- (259) 75. The **quantity** of output of your work group is very high.
- (260) 76. The **quality** of output of your work group is very high.
- (261) 77. When high priority work arises, such as short suspenses, crash programs, and schedule changes, the people in my work group do an **outstanding** job in handling these situations.
- (262) 78. There is a bottleneck in my organization that seriously affects the flow of work either to or from my work group.
- (263) 79. Your work group is frequently involved in crash programs, short suspenses, schedule changes, etc.

0 = Not applicable	4 = Neither agree nor disagree
1 = Strongly disagree	5 = Slightly agree
2 = Moderately disagree	6 = Moderately agree
3 = Slightly disagree	7 = Strongly agree

(264) 80. Your work group always gets maximum output from available resources (e.g., personnel and material).

(265) 81. Your work group's performance in comparison to similar work groups is very high.

#### SUPERVISOR INVENTORY

##### Instructions

The statements below describe characteristics of managers or supervisors. Indicate your agreement by choosing the statement below which best represents your attitude concerning your supervisor.

0 = Not applicable	4 = Neither agree nor disagree
1 = Strongly disagree	5 = Slightly agree
2 = Moderately disagree	6 = Moderately agree
3 = Slightly disagree	7 = Strongly agree

Select the corresponding number and mark your answer on the separate answer sheet.

(403) 82. My supervisor tells me exactly what he expects me to do.

(404) 83. My supervisor is a good planner.

(405) 84. My supervisor sets high performance standards.

(406) 85. My supervisor's group meetings are well planned with specific objectives.

(407) 86. My supervisor encourages goal setting within our group.

(408) 87. My supervisor informs me of changes in advance.

(409) 88. My supervisor is consistent in predicting events in our organization.

(410) 89. My supervisor encourages teamwork.

(411) 90. My supervisor represents the group at all times.

(412) 91. My supervisor establishes good work procedures.

(413) 92. My supervisor has made his responsibilities clear to the group.

(414) 93. My supervisor fully explains procedures to each group member when appropriate.

(415) 94. My supervisor's directions must be followed exactly.

(416) 95. My supervisor performs well under pressure.

(417) 96. My supervisor usually makes decisions without group discussion.

(418) 97. My supervisor encourages me toward greater accomplishment.

(419) 98. My supervisor overemphasizes the need to accomplish more than other groups.

(420) 99. My supervisor resolves conflicts within the group.

(421) 100. My supervisor over controls my work.

0 = Not applicable	4 = Neither agree nor disagree
1 = Strongly disagree	5 = Slightly agree
2 = Moderately disagree	6 = Moderately agree
3 = Slightly disagree	7 = Strongly agree

- (422) 101. My supervisor is approachable.
- (423) 102. My supervisor tries to make the work more satisfying for group members.
- (424) 103. My supervisor takes time to help me when needed.
- (425) 104. My supervisor respects work group members' opinions in his decision making.
- (426) 105. My supervisor asks members for their ideas on task improvements.
- (427) 106. My supervisor is very interested in helping me resolve my problems.
- (428) 107. My supervisor explains how my job contributes to the overall mission.
- (429) 108. My supervisor helps to stimulate enthusiasm for the job.
- (430) 109. My supervisor focuses on major goals.
- (431) 110. My supervisor helps me set specific goals.
- (432) 111. My supervisor is consistent in his managerial behavior.
- (433) 112. My supervisor lets me know when I am doing a good job.
- (434) 113. My supervisor lets me know when I am doing a poor job.
- (435) 114. My supervisor always helps me improve my performance.
- (436) 115. My supervisor insures that I get job related training when needed.
- (437) 116. My job performance has improved due to feedback received from my supervisor.
- (438) 117. My supervisor encourages ideas for improving procedures.
- (439) 118. When I need technical advice I usually go to my supervisor.
- (440) 119. My supervisor is an effective manager.
- (441) 120. My supervisor keeps me informed of changes that affect my job.
- (442) 121. My supervisor frequently gives me feedback on how well I am doing my job.
- (443) 122. My supervisor usually supports my decisions.

#### **ORGANIZATION CLIMATE INVENTORY**

##### **Instructions**

Below are items which describe characteristics of your organization. Indicate your agreement by choosing the statement below which best represents your opinion concerning your organization.

1 = Strongly disagree	5 = Slightly agree
2 = Moderately disagree	6 = Moderately agree
3 = Slightly disagree	7 = Strongly agree
4 = Neither agree nor disagree	

Select the corresponding number and enter it on the separate answer sheet.

- (102) 123. Ideas developed by your work group are readily accepted by management personnel above your supervisor.

1 = Strongly disagree  
2 = Moderately disagree  
3 = Slightly disagree  
4 = Neither agree nor disagree

5 = Slightly agree  
6 = Moderately agree  
7 = Strongly agree

(103) 124. Your organization provides all the necessary information for you to do your job effectively.

(104) 125. Your organization provides adequate and accurate information to your work group.

(105) 126. Our work unit is usually aware of important events and situations.

(106) 127. Your complaints are aired satisfactorily.

(107) 128. Your organization is very effective in planning the work to be accomplished.

(108) 129. Your organization is better run now than in the past.

(109) 130. Your organization is very interested in the attitudes of the group members toward their jobs.

(110) 131. Your organization has a very strong interest in the welfare of its people.

(111) 132. I am very proud to work for this organization.

(112) 133. I feel responsible to my organization in accomplishing its mission.

(113) 134. The information in your organization is widely shared so that those needing it have it available.

(114) 135. The people affected by decisions are asked for their ideas before the decisions are made.

(115) 136. Personnel in my unit are recognized for outstanding performance.

(116) 137. I am usually given the opportunity to present the results of my work to others.

(117) 138. There is a high spirit of teamwork that exists between co-workers.

(118) 139. There is outstanding cooperation between work groups of your organization.

(119) 140. My supervisor's boss is aware of the needs of my work group.

(120) 141. This organization has clear-cut, reasonable goals.

(121) 142. I feel motivated to contribute my best efforts to the mission of this organization.

(122) 143. This organization rewards individuals based on performance.

(123) 144. Rules and regulations of this organization help me to perform my job.

(124) 145. This organization insures that I have the necessary supplies to adequately accomplish my job.

## JOB SATISFACTION QUESTIONNAIRE

### Instructions

The items below relate to your job or the Air Force as a profession. Indicate how satisfied or dissatisfied you are with each item. Choose the statement below which best describes your degree of satisfaction or dissatisfaction.

0 = Not applicable	4 = Neither satisfied or dissatisfied
1 = Extremely dissatisfied	5 = Slightly satisfied
2 = Moderately dissatisfied	6 = Moderately satisfied
3 = Slightly dissatisfied	7 = Extremely satisfied

(704) 146. **Information on Policies and Procedures**  
The adequacy and availability of information on policies, such as promotion or other organization policies.

(705) 147. **Feeling of Helpfulness**  
The chance to help people and improve their welfare through the performance of your job. The importance of your job performance to the welfare of others.

(706) 148. **Control of Others (Non-Supervisory)**  
The chance to tell others what to do. The control your job gives you over material.

(707) 149. **Characteristics of the Local Area**  
The geographical area in which you work, weather in the local area, recreational opportunities available, and the size of the surrounding community.

(708) 150. **Social Contact**  
Opportunity to meet new people, the amount and the meaningfulness of social contacts required by the job.

(709) 151. **Co-Worker Relationships**  
Your amount of effort compared to the effort of your co-workers, the extent to which your co-workers share the load, and the spirit of teamwork which exists between your co-workers.

(710) 152. **Family Attitude Toward Job**  
The recognition and the pride your family has in the work you do.

(711) 153. **On-the-Job Training (OJT)**  
The OJT instructional methods and instructors' competence.

(712) 154. **Technical Training (Other than OJT)**  
The technical training you have received to perform your current job.

(713) 155. **Moral Acceptability of Job**  
The chance to do things not violating your sense of "right and wrong."

(714) 156. **Self-Improvement Opportunities**  
The educational and recreational opportunities provided in the surrounding community, and the opportunity provided by the Air Force for self-improvement education.

(715) 157. **Verbal and Written Communication**  
The amount of required telephone communication and required paperwork in your job.

(716) 158. **Work Itself**  
The challenge, interest, importance, variety, and feelings of accomplishment you receive from your work.

0 = Not applicable	4 = Neither satisfied or dissatisfied
1 = Extremely dissatisfied	5 = Slightly satisfied
2 = Moderately dissatisfied	6 = Moderately satisfied
3 = Slightly dissatisfied	7 = Extremely satisfied

(717) 159. **Work Schedule**  
Your work schedule; flexibility and regularity of your work schedule; the number of hours you work per week.

(718) 160. **Job Security**

(719) 161. **Acquired Valuable Skills**  
The chance to acquire valuable skills in your job which prepare you for future opportunities.

(720) 162. **Base Exchange Services**  
At your base.

(721) 163. **Commissary**  
At your base.

(722) 164. **Medical Facilities**  
At your base.

(723) 165. **Your Job as a Whole**

**APPENDIX B: ORGANIZATIONAL ASSESSMENT PACKAGE (RETEST FORMAT)**

The survey you are about to fill out is a test survey designed to improve the internal reliability of the Organizational Assessment Package, an existing Air Force Survey. The results of this survey will be used to decide if certain items should be added to the OAP.

Your participation is voluntary.

**DO NOT STAPLE OR OTHERWISE DAMAGE THE ANSWER SHEET.**

**PRIVACY ACT STATEMENT**

1. Authority: 10 USC 8012, Secretary of the Air Force, Powers, Duties, Delegation by Compensation E.O. 9397, 22 Nov 43, Numbering System for Federal Accounts Relating to Individual Persons.
2. PRINCIPAL PURPOSE(S): This information will be used for Air Force research and development purposes and for organizational problem area identification.
3. ROUTINE USES: Information provided by respondents will be treated confidentially and will be used for official research purposes and organizational problem area identification. Information obtained will also be used to improve instruments and techniques for organizational assessment.
4. WHETHER DISCLOSURE IS MANDATORY OR VOLUNTARY AND EFFECT ON INDIVIDUAL OF NOT PROVIDING INFORMATION: Disclosure of this information is voluntary. The Air Force continues to improve only with your assistance to make additional refinements in management of its resources. Your cooperation in this effort is appreciated.

## JOB INVENTORY

### Instructions

Below are items which relate to your job. Read each statement carefully and then decide to what extent the statement is true of your job. Indicate the extent that the statement is true for your job by choosing the statement below which best represents your job.

1 = Not at all	5 = To a fairly large extent
2 = To a very little extent	6 = To a great extent
3 = To a little extent	7 = To a very great extent
4 = To a moderate extent	

Select the corresponding number for each question and enter it on the separate answer sheet.

(201)\* 1. To what extent does your job require you to do many different things, using a variety of your talents and skills?

(202) 2. To what extent does your job involve doing a **whole task or unit of work**?

(206) 3. To what extent do **additional duties** interfere with the performance of your primary job?

(207) 4. To what extent do you have adequate tools and equipment to accomplish your job?

(208) 5. To what extent is the amount of work space provided adequate?

(209) 6. To what extent does your job provide the chance to know for yourself when you do a good job; and to be responsible for your own work?

(211) 7. To what extent does your job provide you with the chance to finish completely the piece of work you have begun?

(217) 8. To what extent do you know exactly what is expected of you in performing your job?

(218) 9. To what extent are your job performance goals difficult to accomplish?

(220) 10. To what extent are your job performance goals clear and specific?

(226) 11. To what extent do you perform the same tasks repeatedly within a short period of time?

(227) 12. To what extent are you faced with the same type of problem on a weekly basis?

(228) 13. To what extent are tasks you perform easy to accomplish?

(230) 14. To what extent does your job keep you busy?

(234) 15. To what extent are you aware of promotion/advancement opportunities that affect you?

(239) 16. To what extent do you have the opportunity to progress up your career ladder?

(240) 17. To what extent are you being prepared to accept increased responsibility?

(241) 18. To what extent do people who perform well receive recognition?

(301) 19. To what extent is the condition of tools or equipment that you use adequate?

(302) 20. To what extent are equipment malfunctions handled promptly?

(303) 21. To what extent are necessary materials or supplies available?

(304) 22. To what extent is the lighting in your immediate work area adequate?

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\*Number in parenthesis identifies variable for references only.

1 = Not at all                            5 = To a fairly large extent  
2 = To a very little extent            6 = To a great extent  
3 = To a little extent                 7 = To a very great extent  
4 = To a moderate extent

(305) 23. To what extent is the normal temperature of your work environment comfortable?  
(306) 24. To what extent do you have the opportunity to learn skills which will enhance your promotion potential?  
(307) 25. To what extent are you faced with the same kinds of problems on a daily basis?  
(308) 26. To what extent is it difficult for you to complete tasks assigned to you on schedule?  
(309) 27. To what extent does your job require you to adjust your work plans in order to accomplish a task.  
(310) 28. To what extent does your job require you to juggle your priorities to get work done.  
(212) 29. To what extent does your job require you to use a number of complex skills?

#### JOB CHARACTERISTICS

##### Instructions

Below are statements which deal with job characteristics. Some of these may not be in your job now. However, read each statement below and choose the answer which best represents how much you would like to have each characteristic in your job.

In my job, I would like to have the characteristics described:

1 = A slight amount                    5 = A large amount  
2 = An average amount                6 = A very large amount  
3 = A moderate amount                7 = An extremely large amount  
4 = A fairly large amount

Select the corresponding number and enter it on the separate answer sheet.

(255) 30. A job in which tasks are repetitive.  
(258) 31. A job in which tasks are relatively easy to accomplish.  
(311) 32. A job in which tasks are not difficult to perform.  
(312) 33. A job in which I do not have to perform a wide variety of tasks.

## **PERCEIVED PRODUCTIVITY**

### **Instructions**

The statements below deal with the output of your work group. For some jobs certain statements may not be applicable. Should this be the case for your work group, then you should select the **not applicable** statement coded "0" below. Indicate your agreement with the statement by selecting the answer which best represents your attitude concerning your work group.

0 = Not applicable	4 = Neither agree nor disagree
1 = Strongly disagree	5 = Slightly agree
2 = Moderately disagree	6 = Moderately agree
3 = Slightly disagree	7 = Strongly agree

- (259) 34. The **quantity** of output of your work group is very high.
- (260) 35. The **quality** of output of your work group is very high.
- (261) 36. When high priority work arises, such as short suspenses, crash programs, and schedule changes, the people in my work group do an **outstanding** job in handling these situations.
- (262) 37. There is a bottleneck in my organization that seriously affects the flow of work either to or from my work group.
- (263) 38. Your work group is frequently involved in crash programs, short suspenses, schedule changes, etc.
- (264) 39. Your work group always gets maximum output from available resources (e.g., personnel and material).
- (265) 40. Your work group's performance in comparison to similar work groups is very high.
- (313) 41. Your work group performs effectively under pressure.
- (314) 42. Coworkers in your work group maintain high standards of performance.
- (315) 43. Additional duties disrupt the performance of my work group.
- (316) 44. Lack of clear-cut priorities reduces the performance of my work group.
- (317) 45. Often the red tape connected with my work prevents me from adequately performing my job.
- (318) 46. Unscheduled tasks frequently interrupt the performance of my duties.

## **SUPERVISOR INVENTORY**

### **Instructions**

The statements below describe characteristics of managers or supervisors. Indicate your agreement by choosing the statement below which best represents your attitude concerning your supervisor.

0 = Not applicable	4 = Neither agree nor disagree
1 = Strongly disagree	5 = Slightly agree
2 = Moderately disagree	6 = Moderately agree
3 = Slightly disagree	7 = Strongly agree

Select the corresponding number and mark your answer on the separate answer sheet.

- (415) 47. My supervisor's directions must be followed exactly.
- (417) 48. My supervisor usually makes decisions without group discussion.
- (419) 49. My supervisor overemphasizes the need to accomplish more than other groups.
- (421) 50. My supervisor over controls my work.
- (319) 51. My supervisor rarely allows me the opportunity to decide for myself how to accomplish my job.
- (320) 52. My supervisor controls the pace at which I work.
- (321) 53. My supervisor rarely gives me the opportunity to vary my work methods and procedures.